



2031538

**FINAL POLLUTION REPORT
LIBBY ASBESTOS: Flyway Property, OU2
Libby, Lincoln County, Montana**

**ADMINISTRATIVE
RECORD**

I. HEADING

Date: February 18, 2005
Site Name: Libby Asbestos Site (Flyway Property – OU2)
From: James Christiansen, RPM
To: Kevin Mould, EPA Headquarters
POLREP No.: #9 for Libby Asbestos, initial/final POLREP for Flyway Property
(Part of OU2), PRP lead removal

II. BACKGROUND

Site No.:	BC
Response Authority:	CERCLA
CERCLIS No:	MT0009083840
NPL Status:	Added to NPL: 10/23/02
Action Memorandum Status:	Approved 5/23/00
Action Memorandum Amendment:	08/13/01
Action Memorandum Amendment:	05/09/02

Start Date (Flyway Property) Fund - Lead:	09/01/01
Start Date (Flyway Property) PRP-Lead	07/12/04
Completion Date:(Flyway Property) Fund - Lead:	10/31/01
Completion Date:(Flyway Property) PRP - Lead:	11/30/04

III. SITE INFORMATION

A. Incident Category

PRP and Fund Lead Mix (EPA performed some work; PRP completed remainder). This POLREP reports work done by the PRP, which brought work at the property to completion.

B. Site Description

The Libby Asbestos Site includes an inactive vermiculite mine located in northwestern Montana. Vermiculite mining at Zonolite Mountain (the "mine") was commenced by the Universal Zonolite Company in the 1920s. In 1963, W.R. Grace acquired the property and continued operations until September, 1990.

The processed ore was trucked down the Rainy Creek Road to a Screening Plant, which separated the milled ore into several sizes. Subsequently, the screened ore was moved by conveyor belt across the Kootenai River and shipped either to the Export/Expansion Plant in Libby for further processing or across the country by rail.

This initial/final POLREP addresses only a portion of OU2 - the "Flyway Property." The Flyway property is owned by WR Grace. It is contiguous to the former WR Grace Screening Plant. The Flyway property is a relatively undeveloped, partially wooded, parcel of land between Highway 37 and the Kootenai River. The entire property is approximately 19 acres.

1. Site Location

The Flyway Property is located off Highway 37, several miles NE of Libby, MT. Libby is within Sections 3 and 10, T.30N., R.31W. of the Libby Quadrangle in Lincoln County, MT.

2. Description of Threat

The ore body from which the vermiculite ore was mined contains significant occurrences of amphibole asbestos. Processing of the vermiculite ore, with amphibole asbestos intermixed, caused high dust and airborne releases of asbestos fibers. The release of these fibers into the air makes them available for inhalation and completes the human exposure pathway. These asbestiform fibers have been linked to certain kinds of lung disease and abnormalities. Medical screening completed in Libby showed lung abnormalities among Grace mine workers, as well as people beyond Grace workers and their families, who came into "recreational" contact with the fibers.

The Acting Assistant Administrator, Office of Solid Waste and Emergency Response has determined that the presence of the asbestos at the Site may present an imminent and substantial endangerment in the Action Memorandum.

C. Preliminary Assessment/Site Inspection Results

Anecdotal information suggested that vermiculite was used as fill in several areas of the Flyway Property. Its location near the former Screening Plant also suggested the possibility of contamination. Sampling conducted by EPA's Removal Program began in May 2001. Visual inspection showed the presence of visible vermiculite in various locations around the Flyway Property. Analytical results showed Libby asbestos was present in various locations around the site, in concentrations ranging from trace to greater than 1%. Subsequent investigation revealed more areas with contamination. The Site is contiguous to the River Runs Through It subdivision.

IV. RESPONSE INFORMATION

A. Response Actions

EPA began cleanup of the Flyway property in September 2001. EPA's contractors excavated soil from approximately 4 acres in the southern portion of the property. Unfavorable weather conditions halted work later that year. No removal activities were completed in 2002.

In 2003, EPA began negotiating with WR Grace regarding PRP-lead cleanup at the Flyway. EPA conducted some additional characterization and provided WR Grace with a detailed description of remaining areas to be remediated. WR Grace began cleanup on July 12, 2004. Cleanup involved excavation of contaminated soils, disposal at the former vermiculite mine, and backfilling with clean soil. Some contaminated soils remain at depth, but a minimum of eighteen inches of clean fill cover any remaining areas of measurable contamination. Maximum depth of excavation was four feet. Backfilling was completed on November 24, 2005. The site will be fenced in spring 2005.

B. Enforcement

Work at the Flyway was conducted under an Administrative Order on Consent by W.R. Grace. WR Grace paid EPA \$40,000 in advance for oversight costs. CDM and the USDOT Volpe Center conducted oversight for EPA. Oversight consisted of visual inspection of the work, evaluation of health and safety, collection of split samples, and other work.

C. Future Actions

Removal Actions at the Flyway Property are complete. Most removal actions in OU2 are complete, with the exception of two small parcels that will be addressed by EPA in 2005. At that point, all known removal actions will be complete in OU2. At that point, EPA will continue with any necessary remedial investigation activities and work toward a Record of Decision for OU2. Contamination remains at depth in various areas of OU2, including the Flyway property. Long-term management of these areas must be addressed.

V. COST INFORMATION

Approximate costs incurred by WR Grace were:

Cleanup:	\$1,514,845
Oversight:	\$40,000

WR Grace paid EPA \$40,000 in advance of work to cover the costs of EPA oversight. EPA is currently tabulating final oversight costs, but they are expected to be approximately \$40,000.

VI. DISPOSITION OF WASTES

Approximately 28,520 cubic yards of contaminated material including soil and debris was excavated and disposed of by WR Grace at the former vermiculite mine, located on Rainy Creek Road.